

DISCUSSION OF THE AMENDMENT

Due to the length of the specification herein, Applicants will cite to the paragraph number of the published patent application (PG Pub) of the present application, i.e., US 2005/0256264, when discussing the application description, both in this section and in the Remarks section, *infra*, rather than to page and line of the specification as filed.

Claim 7 has been amended by deleting the term “polyolefin-based” from the preamble, since the recited resin composition is defined by the components therein, recited later in the claim; by changing “polymerization-based” to --polymerization-- for addition polymerization block copolymer (I); and by replacing “polyolefin-based polyolefin resin (II)” with --polyolefin resin (II). Claim 7 has been further amended by replacing the term “containing” with the equivalent --comprising--.

Claim 8 has been amended for grammatical purposes only. Claims 11-14 have been amended to be consistent with the above-discussed amendment to Claim 7.

Claims 15-22 have been canceled.

New Claims 23-30 have been added. Claim 23 is supported at paragraph [0026]; Claim 24 is supported at paragraph [0028]; Claim 25 is supported at paragraph [0029]; Claim 26 is supported at paragraph [0032]; Claim 27 is supported at paragraph [0036]; Claim 28 is supported at paragraph [0041]; Claim 29 is supported at paragraph [0042]; and Claim 30 is supported in the specification at paragraph [0041], all of the specification.

No new matter is believed to have been added by the above amendment. Claims 7-14 and 23-30 are now pending in the application.

REMARKS

The rejection of Claims 7-22 under 35 U.S.C. § 103(a) as unpatentable over WO 01/908818 [sic, WO 01/90818] (Morren et al)¹ in view of EP 0013139 (Arbit), is respectfully traversed.

Morren et al discloses a process for preparing flexographic printing plates, which process comprises selectively curing a flexographic printing plate precursor made of a photo-curable composition comprising a thermoplastic material, and removing at least a part of the thermoplastic material that has not been cured above 60°C by shear force, as well as a photo-curable composition for use in such a process (Abstract). The photo-curable composition comprises (a) one or more block copolymers having at least two blocks A of predominantly mono-vinyl aromatic monomer linked by at least one block B of predominantly polymerized conjugated diene monomer, (b) one or more oligomers of structure B or A-B having a weight average molecular weight of from 300 to 100,000, (c) an ethylenically unsaturated radically polymerizable agent which is at least partially compatible with polymer blocks A, and (d) a photo-initiator (paragraph bridging pages 3 and 4). Morren et al lists a number of applicable mono-vinyl aromatic monomers for blocks A, including styrene and p-methylstyrene, with styrene being the most preferred monomer (paragraph bridging pages 5 and 6). Component (b) is a plasticizer, examples of which are disclosed as oil and liquid polyolefins such as polyisoprene, with polyisoprene being preferred (page 7, lines 3-30). Especially preferred monomers for component (c) are 1,6-hexanediol diacrylate, 1,6-hexanediol dimethacrylate, and hydroxyethyl methacrylate (page 8, lines 26-28).

Arbit discloses a blend of poly(p-methylstyrene) with low molecular weight polyolefins or olefin copolymers which can be crosslinked by ionizing radiation at low

¹ In a telephone conversation with the Examiner and the undersigned attorney on August 13, 2008, the Examiner indicated the correct citation of Morren et al. In addition, since Morren et al has not been made of record herein on an appropriate form, the Examiner was requested to do so in the next Office communication.

dosage levels (page 1, first paragraph). Arbit further discloses comparative data regarding gel content when a mixture of poly(p-methylstyrene) and polyethylene are irradiated compared to analogous compositions using polystyrene instead of poly(p-methylstyrene).

The Examiner holds that it would have been obvious to employ an alkyl styrene, such as p-methylstyrene, in the block copolymers disclosed by Morren et al in order to provide crosslinking of the alkyl styrene blocks, as disclosed by Arbit.

In reply, it is clear from Morren et al that the curing or crosslinking obtained therein is intended to be via the above-discussed component (c), in view of the fact that styrene is disclosed as the preferable mono-vinyl aromatic monomer for blocks A therein. Thus, without the present disclosure as a guide, one skilled in the art would not have combined Arbit with Morren et al, because the greater crosslinking obtained in Arbit with the use of p-methylstyrene is not something desired by Morren et al.

In addition, the specification herein contains comparative data comparing various properties, wherein Examples 1-6, which use p-methylstyrene, are according to the present invention, with Comparative Examples 7-12, which are analogous but employ styrene. Examples 1-6 employ a polymerization block copolymer (I) which is made according to Reference Example 1, as described in the specification at paragraphs [0078]-[0079], or according to Reference Example 2, as described in the specification at paragraphs [0080]-[0081], each of which is derived from at least methylstyrene. Comparative Examples 7-12 employ a polymerization block copolymer (I), according to Reference Example 3, as described in the specification at paragraphs [0082]-[0083], or Reference Example 4, as described in the specification at paragraphs [0084]-[0085] each of which is derived from styrene only as the aromatic vinyl compound unit. The Examples and Comparative Examples were obtained as described in the specification at paragraphs [0086] and [0088]. The results for Examples 1-6 are tabulated in Table 1 at paragraph [0086] of the specification. The

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results for Comparative Examples 7-12 are tabulated in the specification at paragraph [0088].

As described in the specification at paragraph [0091], the results for the Examples are more favorable to that of the Comparative Examples, especially in terms of their heat resistance and solvent resistance, noting that in Comparative Examples 7-12, each of which includes a block copolymer having its hard segment formed of blocks composed solely of styrene units.

Compared to the use of styrene as the polymer block, using p-methylstyrene would be expected to result in a greater crosslinking density and thus, presumably a higher hardness.

However, the data in the above-discussed tables shows that there is no significant difference in hardness while flexibility is maintained, in addition to the above-discussed improvement in heat resistance and solvent resistance.

The above-discussed comparative results could not have been predicted by the applied prior art.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The provisional rejection of Claims 7-22 on the ground of nonstatutory obviousness-type double patenting over Claims 1 and 3-5 of copending Application No. 10/532,244 (copending application) in view of Morren et al., is respectfully traversed. **Submitted herewith** is a Terminal Disclaimer over the copending application. Accordingly, it is respectfully requested that the rejection be withdrawn.

The rejection of Claims 7-22 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Indeed, the rejection would now appear to be moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that the rejection be withdrawn.

Applicants **again** respectfully call the Examiner's attention to the omission of the Examiner's initials in the box corresponding to document AW on the copy of the Form PTO 1449 for the Information Disclosure Statement (IDS) filed April 23, 2007, attached to the Office Action mailed August 23, 2007. The Examiner is respectfully requested to initial the

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Form PTO 1449 submitted therewith, and include a copy thereof with the next Office communication. A copy of the Form PTO 1449 is **submitted herewith** for the Examiner's convenience.

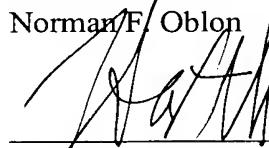
In addition, Applicants respectfully call the Examiner's attention to the Information Disclosure Statement (IDS) filed July 18, 2008. The Examiner is respectfully requested to initial the Form PTO 1449 submitted therewith, and include a copy thereof with the next Office communication.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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